

**ABSTRACT**

Disclosed is a signal processing method and apparatus in MIMO system. In a mobile communication system having a plurality of transmitting antennas, the present invention includes the steps of receiving a feedback signal including status information of at least one channel, segmenting one of the first data blocks to segment into at least one or more of the second data blocks, attaching a CRC to each of the at least one or more of the second data blocks, allocating the at least one or more second data blocks to a plurality of the transmitting antennas, respectively, and transmitting the at least one or more of the second data blocks. In a mobile communication system having a plurality of receiving antennas, the present invention includes the steps of receiving at least one data block including a CRC or dummy bits, acquiring channel status information using the CRC or dummy bits, and transmitting the channel status information.